

July 24, 2019

SolutionPartner

# 2Q 2019 Business Results & Outlook



 LG Chem



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**The business results currently under audit review are presented here for investors' convenience. Hence, please be advised that some of their contents may be altered in the course of audit.**

**The business results are subject to the K-IFRS(Korea International Financial Reporting Standards).**

**Forecasts and projections contained in this material are based on current business environments and management's strategies. Please note it may differ from actual results, due to uncertainties including changes in the future business environment and recalibration of strategy.**

# 2Q 2019 Business Results

## Income Statements

(Unit:KRW bn)

	2018			2019		YoY	QoQ
	2Q	3Q	4Q	1Q	2Q		
<b>Sales</b>	7,052	7,235	7,343	6,639	<b>7,177</b>	<b>+1.8%</b>	<b>+8.1%</b>
<b>OP (%)</b>	703 10.0%	602 8.3%	290 3.9%	275 4.1%	<b>268</b> <b>3.7%</b>	<b>-62.0%</b>	<b>-2.9%</b>
<b>EBITDA (%)</b>	1,065 15.1%	975 13.5%	684 9.3%	682 10.3%	<b>725</b> <b>10.1%</b>	<b>-31.9%</b>	<b>+6.3%</b>
<b>Pre-tax Income (%)</b>	644 9.1%	485 6.7%	158 2.1%	280 4.2%	<b>193</b> <b>2.7%</b>	<b>-70.1%</b>	<b>-31.0%</b>
<b>Net Income (%)</b>	493 7.0%	347 4.8%	127 1.7%	212 3.2%	<b>84</b> <b>1.2%</b>	<b>-83.0%</b>	<b>-60.4%</b>

# 2Q 2019 Business Results

## Financial Position

### Balance Sheet

(Unit:KRW tn)

	2018	1Q 2019	2Q 2019	QoQ
<b>Asset</b>	28.94	31.21	32.44	+3.9%
<b>Cash and Equivalents</b>	2.56	3.12	2.67	-14.6%
<b>Liabilities</b>	11.62	14.01	15.16	+8.2%
<b>Debt</b>	5.32	6.90	8.48	+22.8%
<b>Shareholder's Equity</b>	17.32	17.20	17.28	+0.5%

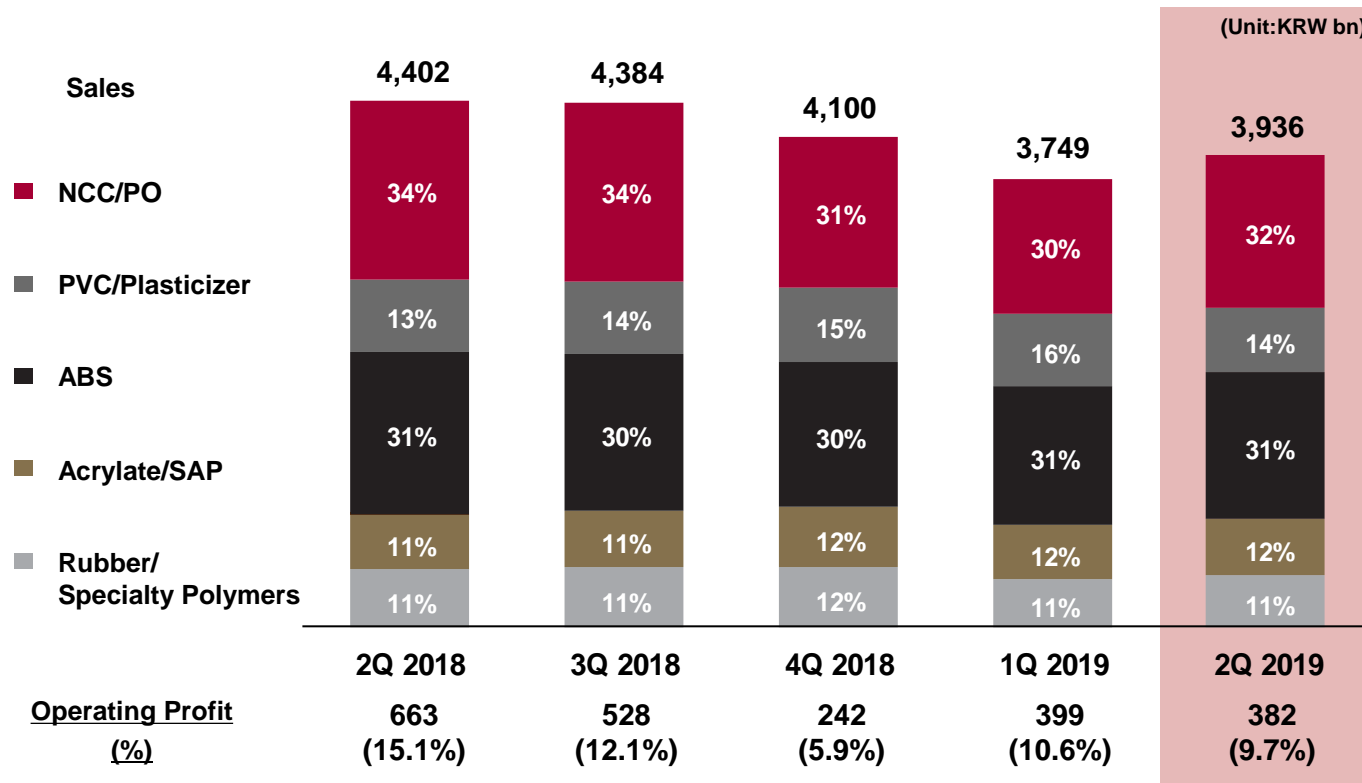
### Financial Ratios

	2018	1Q 2019	2Q 2019	QoQ
<b>Liabilities / Equity</b>	67.1%	81.5%	87.7%	+6.2%p
<b>Debt / Equity</b>	30.7%	40.1%	49.1%	+9.0%p
<b>Net Debt / Equity</b>	16.0%	22.0%	33.6%	+11.6%p
<b>ROE</b>	9.0%	4.9%	3.4%	-1.5%p
<b>ROA</b>	5.6%	2.8%	1.9%	-0.9%p

※ ROE: Annualized net profit / Avg of beginning & ending shareholders' equity  
 ROA: Annualized net profit / Avg of beginning & ending assets

# Results & Outlook by Business

Petrochemicals



## [Analysis]

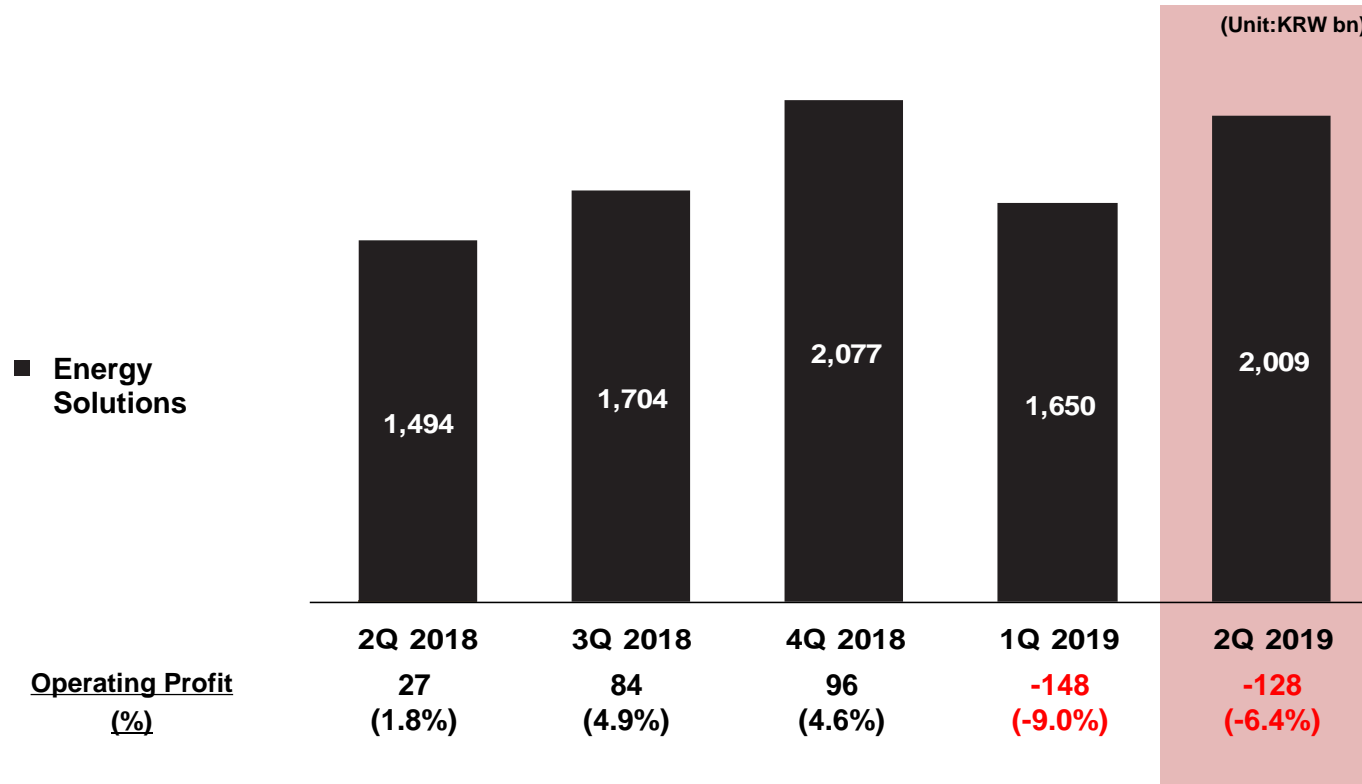
- Pressuring profitability due to one-off loss and lower spread which caused by sluggish demand and rise in feedstock prices

## [Outlook]

- Spreads for main products are expected to be weak but limited possibility of further decline
- Solid performance in premium products and full effect of capacity expansion

# Results & Outlook by Business

Energy Solutions



## [Analysis]

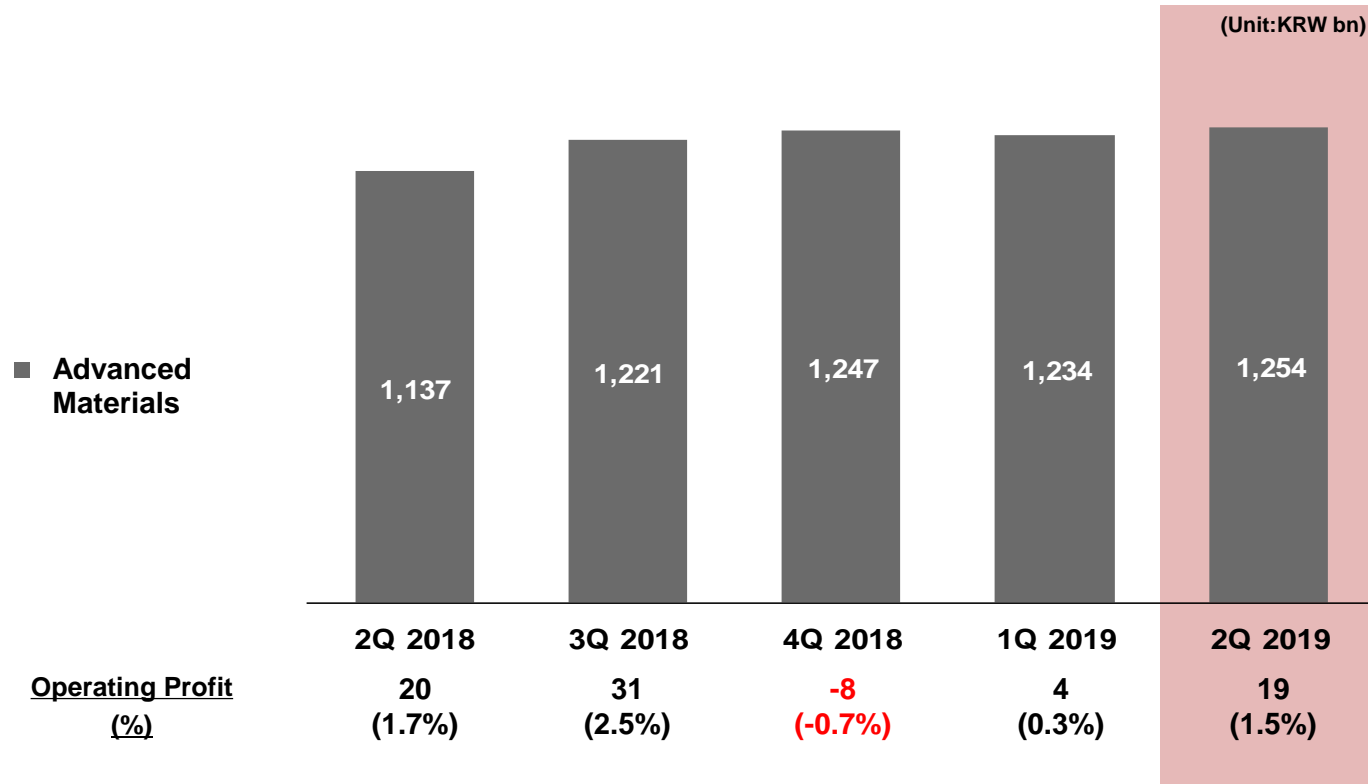
- Loss recorded due to an increase in fixed cost, operation cost in new capacity, and one-off loss in ESS

## [Outlook]

- Profitability is expected to be improved because of an increase sales in all business segments and stabilization in production yield

# Results & Outlook by Business

## Advanced Materials



### [Analysis]

- Slightly improved sales and profitability due to increased shipment of IT materials

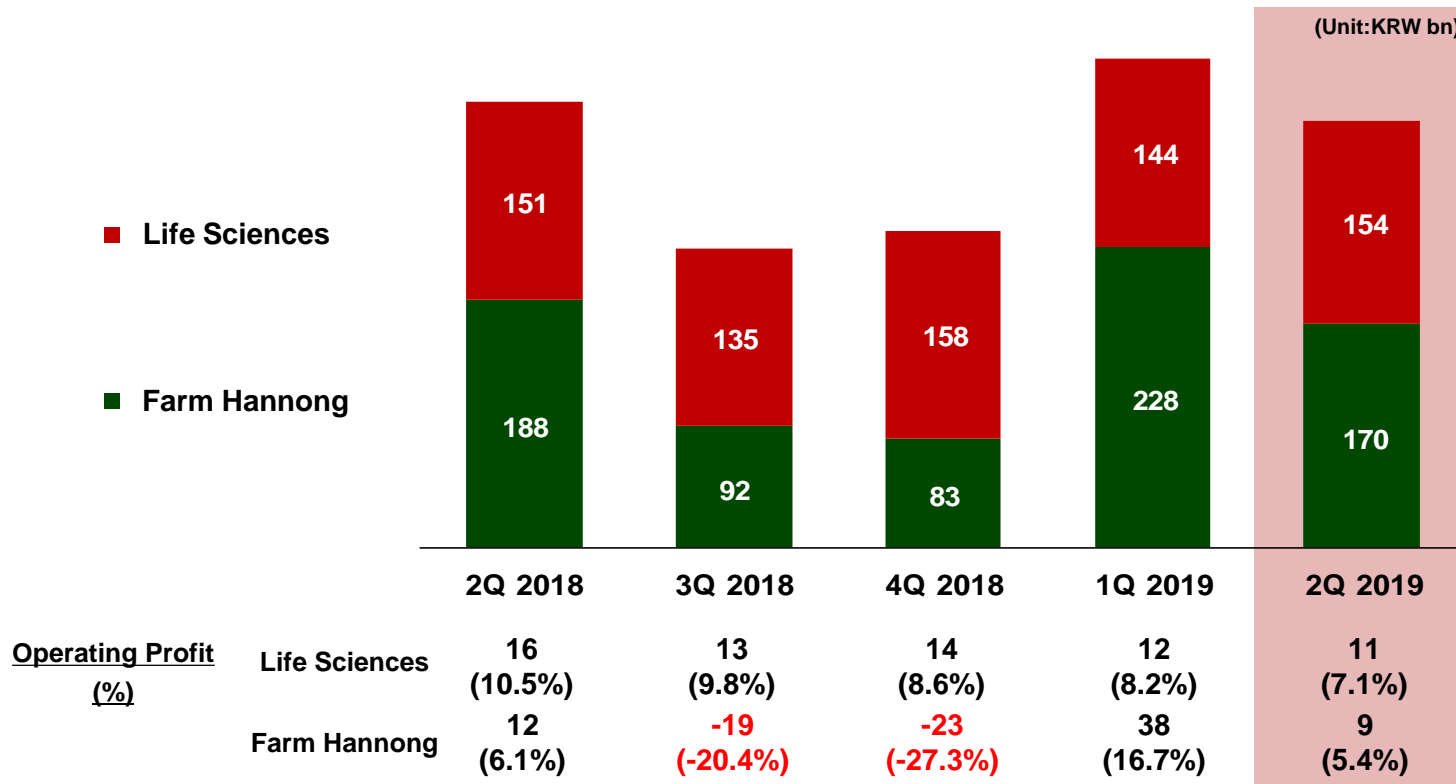
### [Outlook]

- Sales are expected to grow in increased shipment of Automotive and IT materials



# Results & Outlook by Business

Life Sciences / Farm Hannong



## [Analysis]

- Life Sciences: Increased sales due to expansion of sales in Eucept and Zemiglo
- Farm Hannong: Decreased YoY sales due to focusing on profit-driven selective bidding and reduced domestic consumption

## [Outlook]

- Life Sciences: Although sales in main products is expected to grow, R&D expenses increase as well
- Farm Hannong: Increased YoY profitability is expected due to expansion of sales in premium products

# Appendix

## Sales & Operating Profits by Business

(Unit:KRW bn)

LG CHEM	2017					2018					2019		
	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	
<b>Sales</b>	6,487	6,382	6,397	6,432	25,698	6,554	7,052	7,235	7,343	28,183	6,639	7,177	13,817
<b>Operating Profits</b>	797	727	790	615	2,929	651	703	602	290	2,246	275	268	543
(%)	12.3%	11.4%	12.3%	9.6%	11.4%	9.9%	10.0%	8.3%	3.9%	8.0%	4.1%	3.7%	3.9%
<b>EBITDA</b>	1,151	1,074	1,137	972	4,335	1,006	1,065	975	684	3,730	682	725	1,408
(%)	17.7%	16.8%	17.8%	15.1%	16.9%	15.3%	15.1%	13.5%	9.3%	13.2%	10.3%	10.1%	10.2%
<b>Petrochemicals</b>	4,240	4,072	4,031	4,036	16,378	4,100	4,402	4,384	4,100	16,987	3,749	3,936	7,685
NCC/PO	1,438	1,351	1,318	1,409	5,516	1,415	1,504	1,495	1,267	5,681	1,136	1,270	2,405
PVC/Plasticizer	588	572	560	568	2,288	605	596	611	622	2,434	596	538	1,134
ABS	1,216	1,185	1,261	1,214	4,876	1,233	1,357	1,304	1,209	5,102	1,170	1,228	2,397
Acrylate/SAP	435	427	425	420	1,706	427	468	477	495	1,868	447	461	909
Rubber/ Specialty Polymer	563	537	467	424	1,991	420	478	497	508	1,903	400	440	840
<b>Operating Profits</b>	700	666	721	596	2,683	598	663	528	242	2,031	399	382	781
(%)	16.5%	16.4%	17.9%	14.8%	16.4%	14.6%	15.1%	12.1%	5.9%	12.0%	10.6%	9.7%	10.2%
<b>Energy Solutions</b>	999	1,120	1,189	1,253	4,561	1,245	1,494	1,704	2,077	6,520	1,650	2,009	3,660
<b>Operating Profits</b>	-10	8	18	14	29	2	27	84	96	209	-148	-128	-276
(%)	-1.0%	0.7%	1.5%	1.1%	0.6%	0.2%	1.8%	4.9%	4.6%	3.2%	-9.0%	-6.4%	-7.5%
<b>Advanced Materials</b>	1,057	1,053	1,144	1,148	4,402	1,107	1,137	1,221	1,247	4,710	1,234	1,254	2,487
<b>Operating Profits</b>	63	43	75	56	237	29	20	31	-8	71	4	19	23
(%)	6.0%	4.1%	6.6%	4.8%	5.4%	2.6%	1.7%	2.5%	-0.7%	1.5%	0.3%	1.5%	0.9%
<b>Life Sciences</b>	129	135	139	148	552	131	151	135	158	575	144	154	298
<b>Operating Profits</b>	21	19	13	1	54	7	16	13	14	50	12	11	23
(%)	15.9%	14.0%	9.5%	0.6%	9.7%	5.3%	10.5%	9.8%	8.6%	8.6%	8.2%	7.1%	7.6%
<b>Farm Hannong</b>	254	186	97	68	604	237	188	92	83	600	228	170	398
<b>Operating Profits</b>	50	14	-10	-19	36	45	12	-19	-23	15	38	9	47
(%)	19.8%	7.3%	-10.0%	-28.0%	5.9%	19.2%	6.1%	-20.4%	-27.3%	2.6%	16.7%	5.4%	11.9%

※ Applied retroactive effects of past performance based on the reorganization

# Appendix

## CAPEX / R&D Expenses

### CAPEX

(Unit:KRW tn)

	2017	2018	1Q 2019	2Q 2019
<b>Petrochemicals</b>	0.6	1.4	0.4	0.4
<b>Energy Solutions</b>	1.0	1.9	0.6	0.7
<b>Advanced Materials</b>	0.2	0.5	0.1	0.2
<b>Life Sciences</b>	0.1	0.1	0.01	0.02
<b>Common (including Farm Hannong)</b>	0.6	0.7	0.1	0.1
<b>Total</b>	2.5	4.6	1.3	1.4

### R&D Expenses

(Unit:KRW bn)

	2017	2018	1Q 2019	2Q 2019
<b>Petrochemicals</b>	132	144	34	39
<b>Energy Solutions</b>	299	320	98	98
<b>Advanced Materials</b>	213	235	42	52
<b>Life Sciences</b>	96	124	32	37
<b>Common (including Farm Hannong)</b>	152	238	51	59
<b>Total</b>	893	1,062	261	285

# Appendix

## Income Statements

(Unit:KRW bn)

	2017					2018					2019		
	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	
<b>Sales</b>	6,487	6,382	6,397	6,432	<b>25,698</b>	6,554	7,052	7,235	7,343	<b>28,183</b>	6,639	7,177	<b>13,817</b>
Cost of Sales	5,073	5,011	4,940	5,110	<b>20,135</b>	5,212	5,580	5,868	6,177	<b>22,837</b>	5,469	6,029	<b>11,499</b>
Gross Profit(%)	1,414	1,371	1,457	1,322	<b>5,564</b>	1,342	1,472	1,367	1,166	<b>5,346</b>	1,170	1,148	<b>2,318</b>
	21.8%	21.5%	22.8%	20.6%	<b>21.6%</b>	20.5%	20.9%	18.9%	15.9%	<b>19.0%</b>	17.6%	16.0%	<b>16.8%</b>
SG&A Expenses	617	644	667	707	<b>2,635</b>	691	768	765	876	<b>3,100</b>	895	881	<b>1,775</b>
<b>Operating Profit(%)</b>	797	727	790	615	<b>2,929</b>	651	703	602	290	<b>2,246</b>	275	268	<b>543</b>
	12.3%	11.4%	12.3%	9.6%	<b>11.4%</b>	9.9%	10.0%	8.3%	3.9%	<b>8.0%</b>	4.1%	3.7%	<b>3.9%</b>
Other non-operating income(expenses)	-99	3	-87	-181	<b>-365</b>	2	-59	-117	-132	<b>-306</b>	4	-75	<b>-70</b>
Income before tax	698	730	702	434	<b>2,564</b>	653	644	485	158	<b>1,940</b>	280	193	<b>473</b>
<b>Net Income</b>	548	590	546	338	<b>2,022</b>	553	493	347	127	<b>1,519</b>	212	84	<b>296</b>
EPS(Unit:KRW)	6,936	7,531	6,799	4,101	<b>25,367</b>	6,934	6,234	4,481	1,568	<b>19,217</b>	2,537	888	<b>3,425</b>

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# Appendix

## Financial Position

(Unit:KRW bn)

	2017				2018				2019	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
<b>Assets</b>	<b>22,171</b>	<b>22,671</b>	<b>23,708</b>	<b>25,041</b>	<b>26,416</b>	<b>27,399</b>	<b>28,419</b>	<b>28,944</b>	<b>31,212</b>	<b>32,436</b>
Cash and Equivalents	1,909	2,107	2,400	2,779	3,132	2,830	3,333	2,557	3,122	2,667
A/R	3,961	4,184	4,523	4,449	4,709	5,146	4,949	4,381	4,616	4,738
Inventory	3,250	3,086	3,187	3,353	3,784	3,950	4,404	4,290	4,503	4,771
Tangible / Intangible Assets	11,773	11,954	12,130	13,035	13,366	13,936	14,074	15,845	16,938	17,993
<b>Liabilities</b>	<b>7,265</b>	<b>7,137</b>	<b>7,586</b>	<b>8,703</b>	<b>9,905</b>	<b>10,391</b>	<b>11,162</b>	<b>11,622</b>	<b>14,013</b>	<b>15,157</b>
A/P	1,808	1,609	1,756	2,015	1,999	2,156	2,541	2,166	2,434	2,549
Short-term debts	2,175	1,454	1,361	1,451	1,593	1,903	2,037	1,613	1,630	1,432
Long-term debts	972	1,869	1,915	1,594	2,643	3,211	3,262	3,708	5,275	7,049
<b>Shareholders' Equity</b>	<b>14,906</b>	<b>15,535</b>	<b>16,122</b>	<b>16,339</b>	<b>16,510</b>	<b>17,009</b>	<b>17,257</b>	<b>17,322</b>	<b>17,199</b>	<b>17,279</b>
<b>Liabilities/Equity(%)</b>	<b>48.7%</b>	<b>45.9%</b>	<b>47.1%</b>	<b>53.3%</b>	<b>60.0%</b>	<b>61.1%</b>	<b>64.7%</b>	<b>67.1%</b>	<b>81.5%</b>	<b>87.7%</b>
<b>Net debt/Equity(%)</b>	<b>8.3%</b>	<b>7.8%</b>	<b>5.4%</b>	<b>1.6%</b>	<b>6.7%</b>	<b>13.4%</b>	<b>11.4%</b>	<b>16.0%</b>	<b>22.0%</b>	<b>33.6%</b>
<b>BPS (Unit:KRW)</b>	<b>188,859</b>	<b>196,894</b>	<b>203,952</b>	<b>206,544</b>	<b>208,363</b>	<b>214,535</b>	<b>217,500</b>	<b>218,227</b>	<b>216,308</b>	<b>217,445</b>

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# Appendix

## Cash Flows

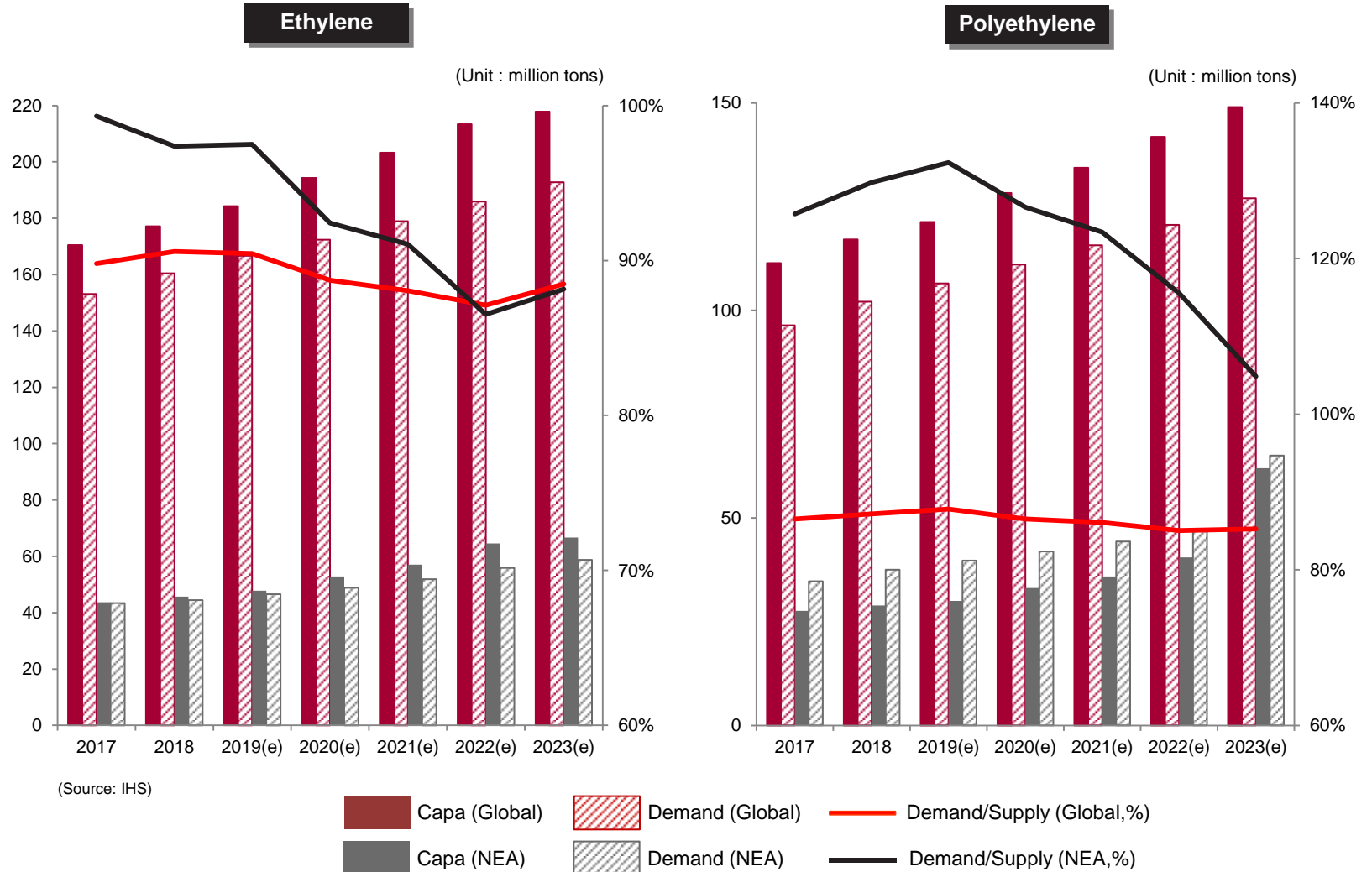
(Unit:KRW bn)

	2017					2018					2019		
	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	3Q
<b>Beginning Cash Balance</b>	2,207	1,909	2,107	2,400	<b>2,207</b>	2,779	3,132	2,830	3,333	<b>2,779</b>	2,557	3,122	<b>2,557</b>
<b>Operating / Investing Activities</b>	0	442	350	546	<b>1,337</b>	-831	-662	289	-798	<b>-2,001</b>	-903	-1,490	<b>-2,392</b>
Operating Profits	797	727	790	615	<b>2,929</b>	651	703	602	290	<b>2,246</b>	275	268	<b>543</b>
Depreciation	355	347	347	357	<b>1,406</b>	355	362	373	394	<b>1,484</b>	407	458	<b>865</b>
Working Capital	-462	-258	-294	168	<b>-845</b>	-707	-446	128	326	<b>-699</b>	-181	-275	<b>-456</b>
Investing Activities	-223	-514	-571	-315	<b>-1,623</b>	-867	-744	-905	-1,610	<b>-4,126</b>	-1,547	-1,729	<b>-3,276</b>
Others	-466	139	77	-279	<b>-529</b>	-262	-537	91	-198	<b>-907</b>	143	-210	<b>-68</b>
<b>Financing Activities</b>	-271	-262	-72	-132	<b>-737</b>	1,170	369	238	17	<b>1,794</b>	1,450	1,003	<b>2,453</b>
Debts	-474	177	-47	-232	<b>-575</b>	1,191	878	186	-3	<b>2,252</b>	1,498	1,661	<b>3,159</b>
Dividends	-	-386	-	-	<b>-386</b>	-	-460	-32	-2	<b>-494</b>	-	-484	<b>-484</b>
<b>Ending Cash Balance</b>	1,909	2,107	2,400	2,779	<b>2,779</b>	3,132	2,830	3,333	2,557	<b>2,557</b>	3,122	2,666	<b>2,666</b>

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# Appendix

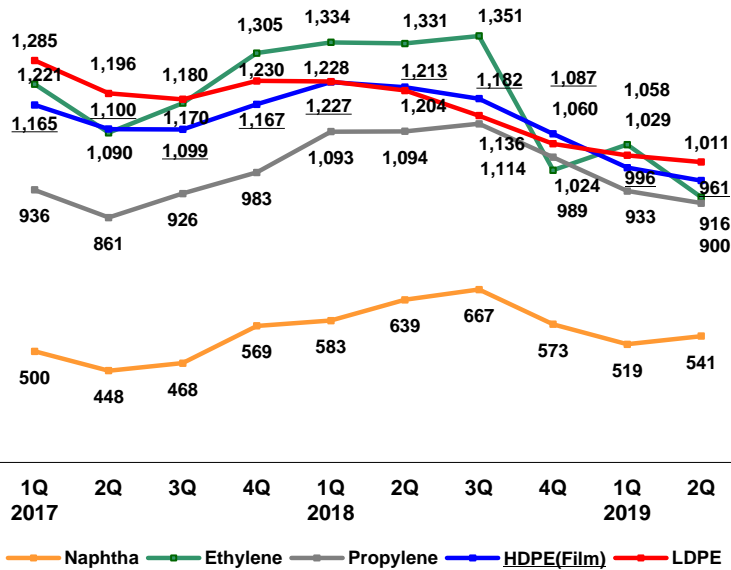
## Ethylene / PE Demand Supply



# Appendix

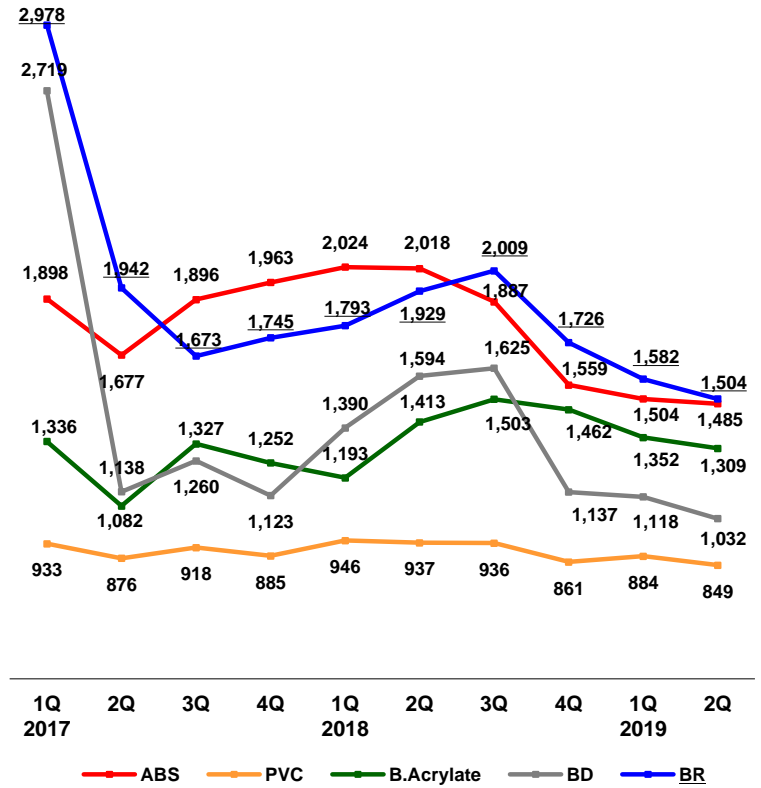
## Quarterly Price Trends

(Unit : USD/MT)



NCC/PO

(Unit : USD/MT)



ABS

PVC/  
Plasticizer

Acrylate/SAP

Rubber/Specialty  
Polymers

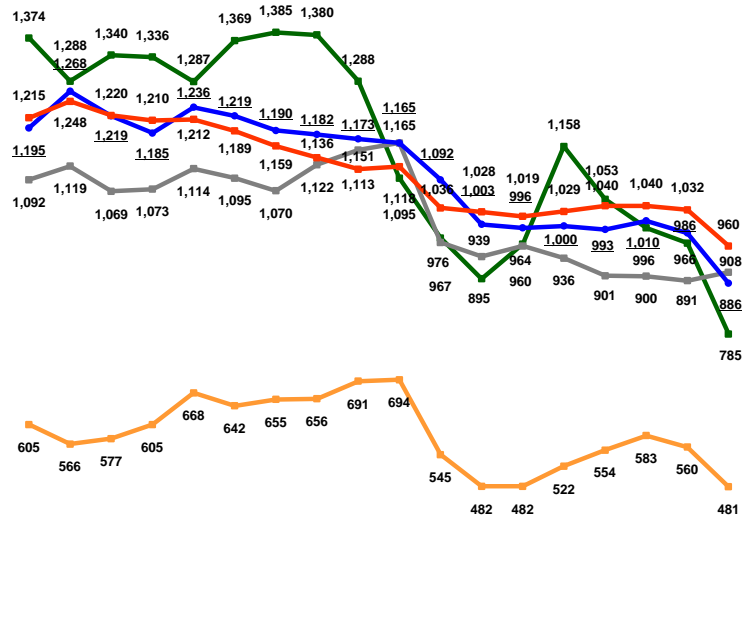
• The prices are average price of CFR FE Asia for general grade in each product group.



# Appendix

## Monthly Price Trends

(Unit : USD/MT)

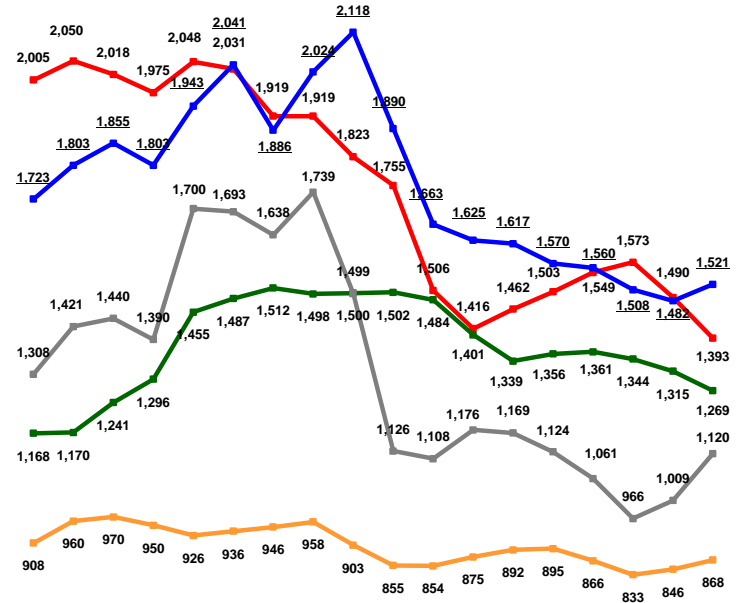


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun 2018 2019

— Naphtha — Ethylene — Propylene — HDPE(Film) — LDPE

NCC/PO

(Unit : USD/MT)



Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun 2018 2019

— ABS — PVC — B.Acrylate — BD — BR

ABS

PVC/  
Plasticizer

Acrylate/SAP

Rubber/Specialty  
Polymers

• The prices are average price of CFR FE Asia for general grade in each product group.

# Thank you



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